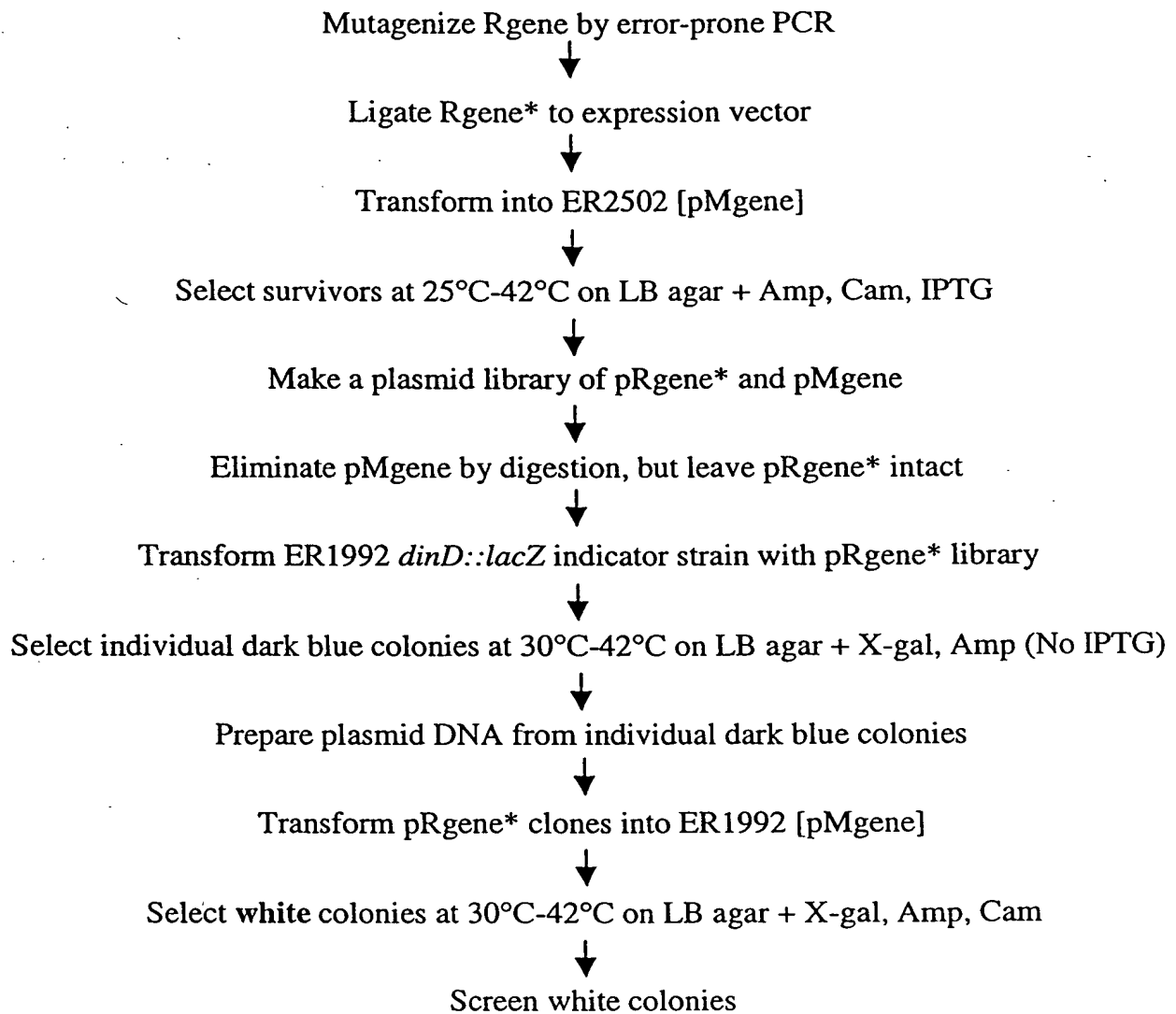
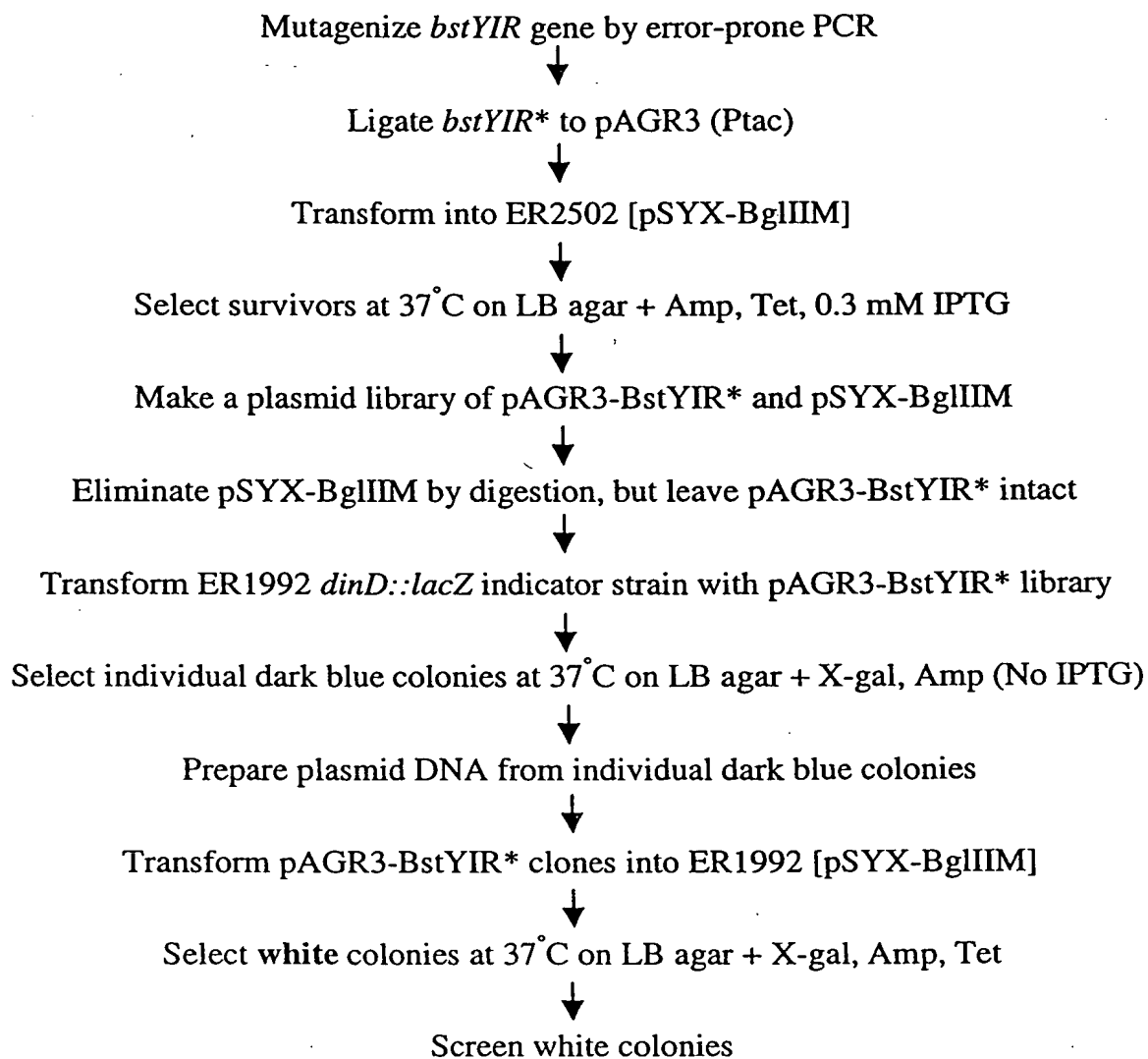


Figure 1A



The white colonies may contain Rgene* variants with desired specificity

Figure 1B

Genetic Selection of *Bst*YI Variants with 5'-AGATCT-3' specificity

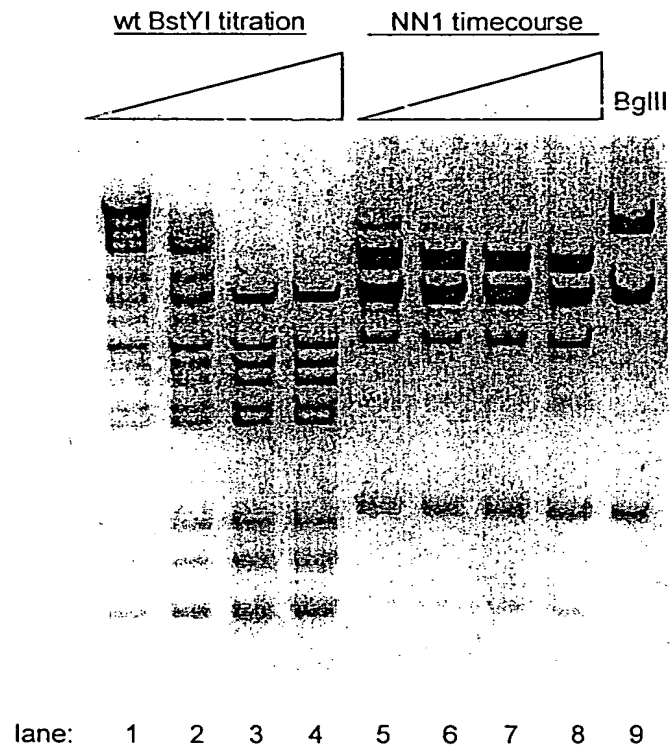
The white colonies may contain *Bst*YI* mutants with *Bgl*II specificity

FIGURE 2

ATGAGAATTGTTGAAGTATATTCGCATTTGAACGGGTTGGAATACATACAAGTTCACTTG
1 -----+-----+-----+-----+-----+-----+ 60
M R I V E V Y S H L N G L E Y I Q V H L
CCACATATTGGGAAGAAATTCAGAAATATTGTTTCTATTGACGCAGAAGCTTG TAGA
61 -----+-----+-----+-----+-----+-----+ 120
P H I W E E I Q E I I V S I D A E A C R
ACGAAGGAATCAAAAAGAAAAGACAAAACAAGGACAAATACTTTATAGTCCCGTAGCTTTA
121 -----+-----+-----+-----+-----+-----+ 180
T K E S K E K T K Q G Q I L Y S P V A L
AATGAAGCATTCAGGAAAAATTAGAAGCAAAAGGTTGGAAGAAAGTCGAACAAACTAT
181 -----+-----+-----+-----+-----+-----+ 240
N E A F K E K L E A K G W K E S R T N Y
TATGTGACTGCTGACCCAAAGCTGATTCGTGAAACATTATCACTTGAACCAGAGGAACAA
241 -----+-----+-----+-----+-----+-----+ 300
Y V T A D P K L I R E T L S L E P E E Q
AAGAAAGTGATTGAAGCCGCAGGAAAAGAAGCATTAAGTCTTATAATCAAACGGATTTT
301 -----+-----+-----+-----+-----+-----+ 360
K K V I E A A G K E A L K S Y N Q T D F
GTAAAAGATAGAGTGGCAATAGAAGTTCAATTCGGAATAATTCTTTGTCGCTTATGAC
361 -----+-----+-----+-----+-----+-----+ 420
V K D R V A I E V Q F G K Y S F V A Y D
CTTTTCGTCAAACACATGGCTTTCTATGTTAGTGATAAAATTGACGTTGGTGTCGAAATA
421 -----+-----+-----+-----+-----+-----+ 480
L F V K H M A F Y V S D K I D V G V E I
TTGCCAATGAAGGAATTATCAAAAGAAATGTCTTCGGGAATCAGTTATTACGAAGGTGAA
481 -----+-----+-----+-----+-----+-----+ 540
L P M K E L S K E M S S G I S Y Y E G E
TTATACAATGTGATACGGCAAGGTCGTGGCGTTCCGTGCCGTTCCGTTGGTTTTAATCGGG
541 -----+-----+-----+-----+-----+-----+ 600
L Y N V I R Q G R G V P A V P L V L I G
ATTGCCCCCTTAA
601 -----+--- 612
I A P *

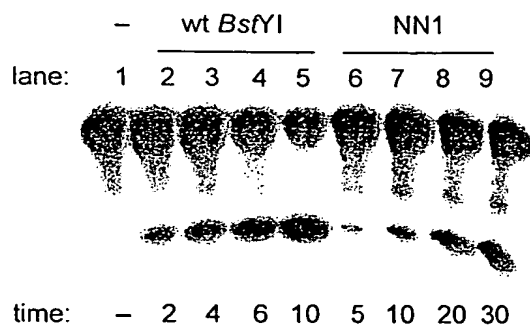
10/501196

Figure 3



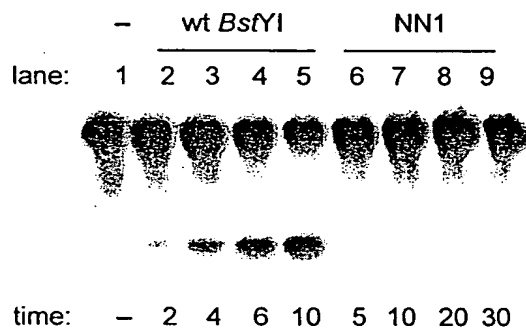
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FIGURE 4A



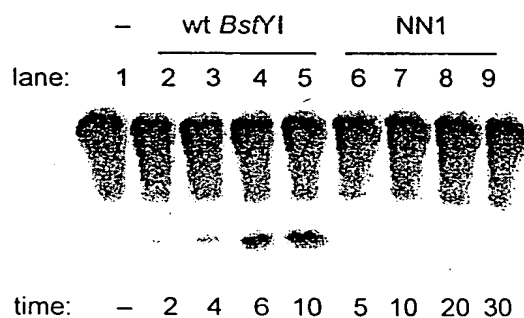
5'.....AGATCT.....3'
3'.....TCTAGA.....5'

FIGURE 4B



5'.....GGATCC.....3'
3'.....CCTAGG.....5'

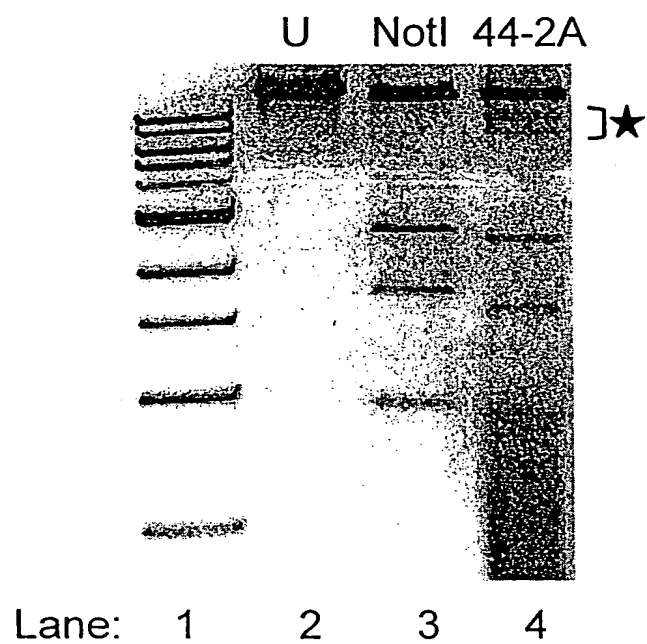
FIGURE 4C



5'.....AGATCC.....3'
3'.....TCTAGG.....5'

10/501196

Figure 5



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Figure 6

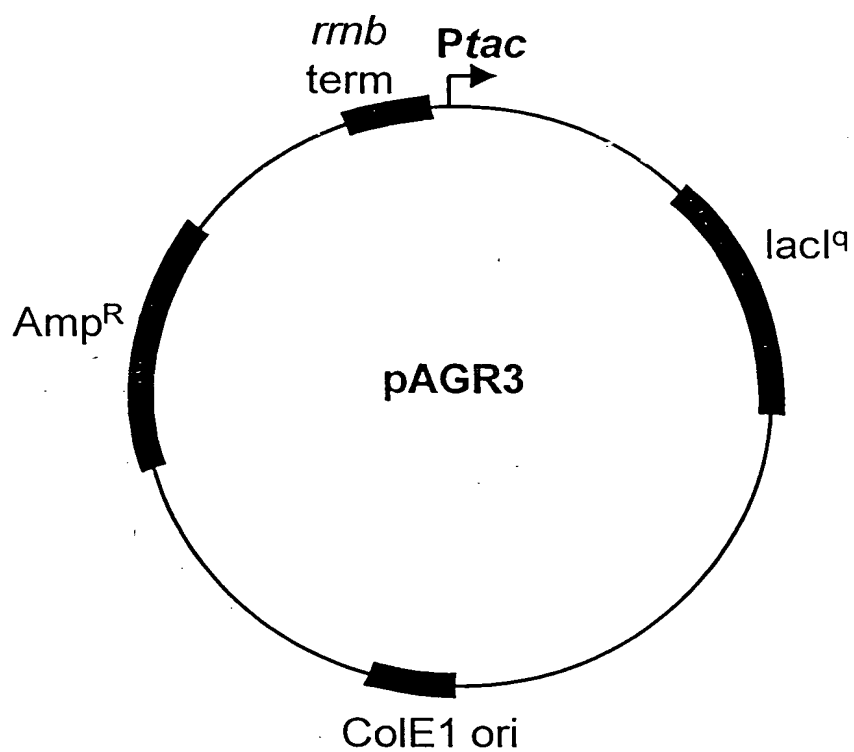


Figure 7

